

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P840943

Luminaire Tested: **ARCH4-110-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840943
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-110-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 920mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18454 lumens
Efficiency: N/A
Efficacy: 163.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 112.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

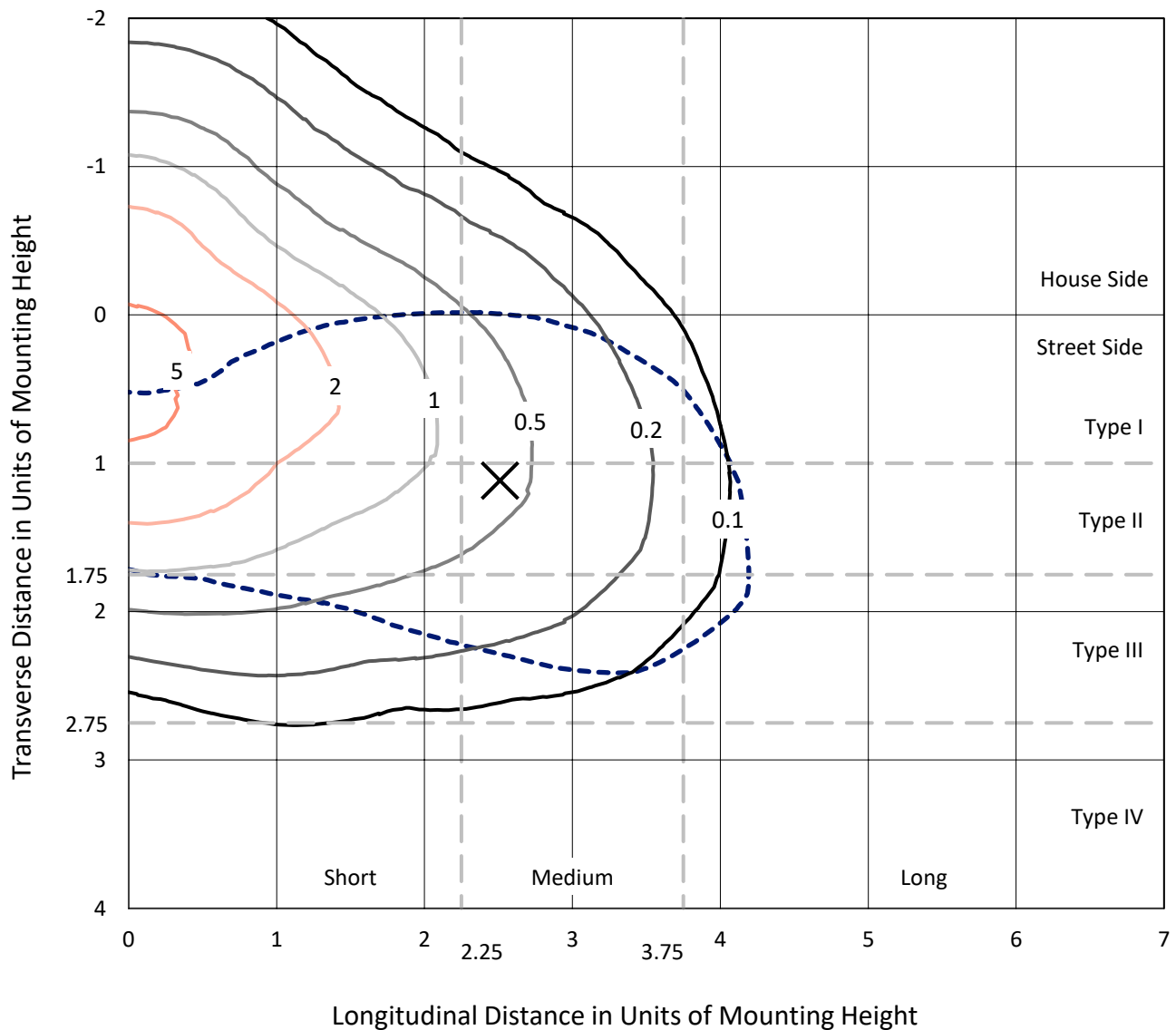


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Iso-Footcandle Lines of Horizontal Illumination

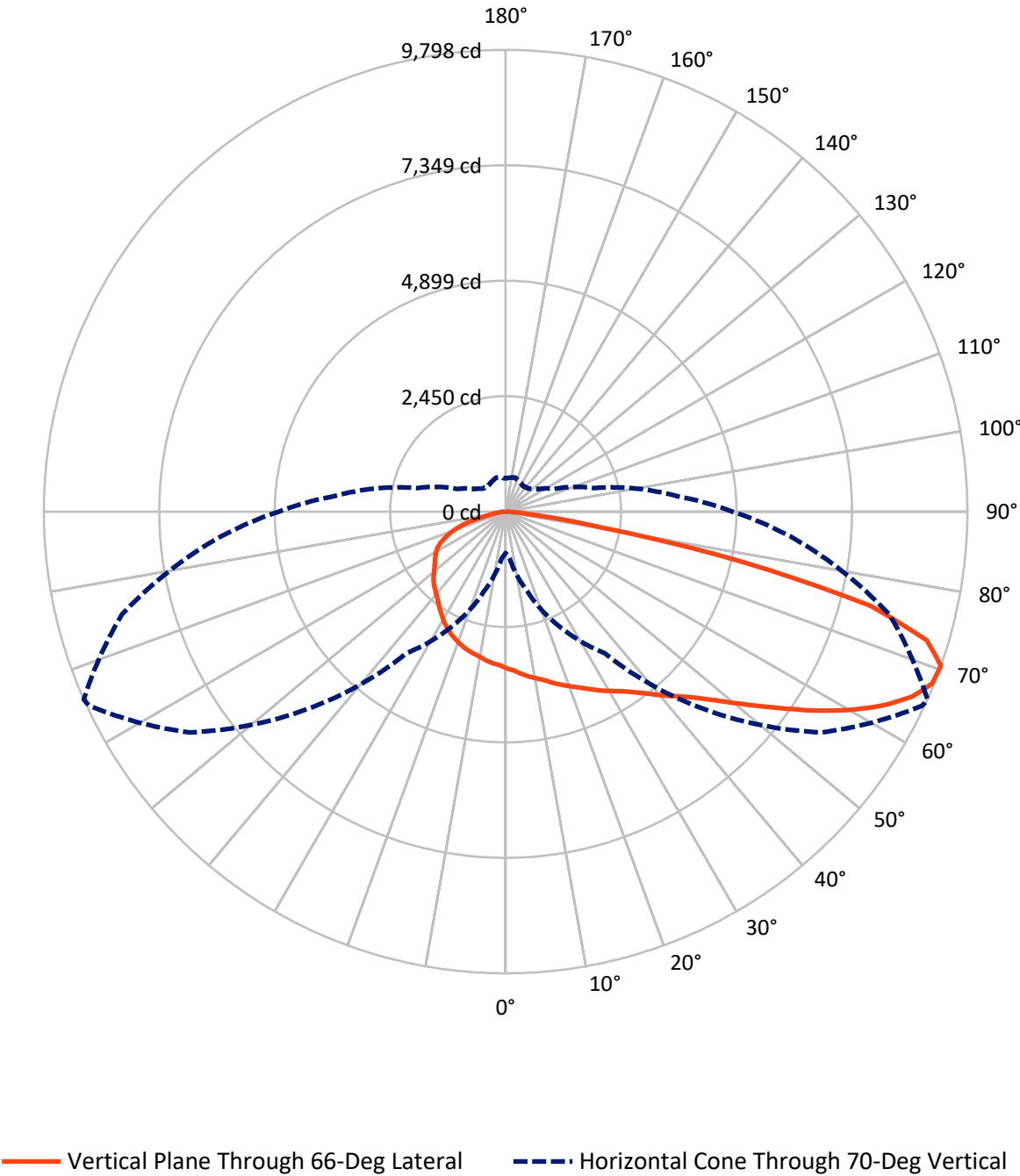
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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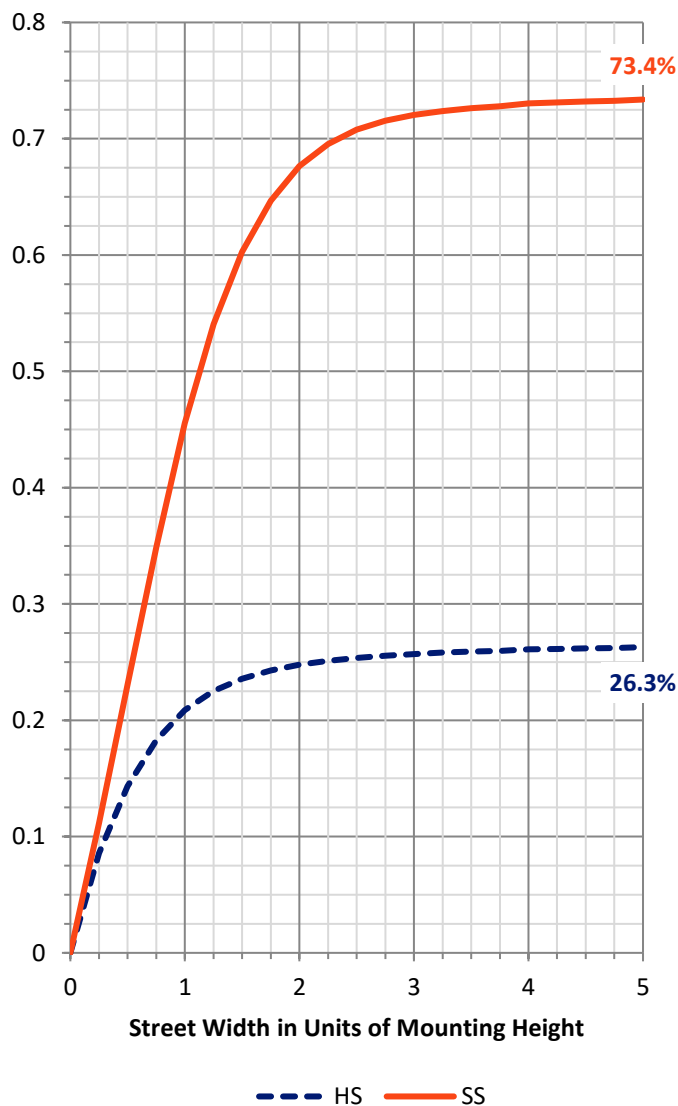
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4889.9	0.0	4889.9
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	13564.1	0.0	13564.1
	% Fixture	73.5	0.0	73.5
Total	Lumens	18454.0	0.0	18454.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.0	1.7
10°-20°	960.0	5.2
20°-30°	1609.2	8.7
30°-40°	2409.5	13.1
40°-50°	3221.6	17.5
50°-60°	3761.3	20.4
60°-70°	3740.0	20.3
70°-80°	2214.1	12.0
80°-90°	218.2	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	18454.0	100.0
0°-180°	18454.0	100.0

Coefficient of Utilization



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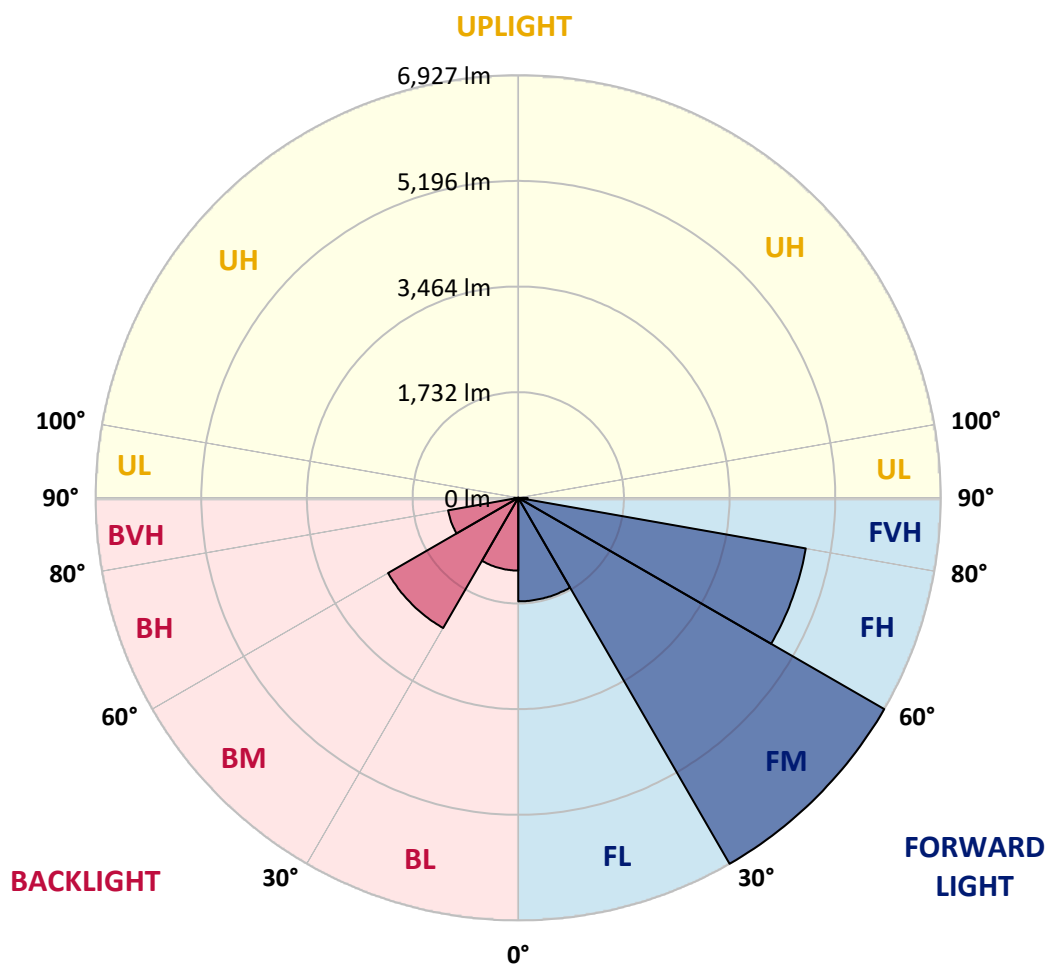
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1697.3	9.2			
FM	(30°-60°)	6927.4	37.5			
FH	(60°-80°)	4786.1	25.9			G2/5000
FVH	(80°-90°)	153.4	0.8			G2/225
BL	(0°-30°)	1191.9	6.5	B3/2500		
BM	(30°-60°)	2465.0	13.4	B2/2500		
BH	(60°-80°)	1168.1	6.3	B3/2500		G3/2500
BVH	(80°-90°)	64.9	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3330.5	3330.5	3330.5	3330.5	3330.5	3330.5	3330.5	3330.5	3330.5	3330.5	3330.5
2.5°	3453.0	3447.5	3444.8	3433.9	3409.4	3420.3	3395.8	3379.5	3376.8	3338.7	3316.9
5°	3594.5	3591.7	3586.3	3570.0	3531.9	3537.3	3496.5	3466.6	3458.4	3398.6	3352.3
7.5°	3714.2	3708.7	3706.0	3684.3	3643.4	3640.7	3591.7	3548.2	3534.6	3453.0	3382.2
10°	3806.7	3798.5	3804.0	3782.2	3738.7	3730.5	3667.9	3610.8	3597.2	3493.8	3395.8
12.5°	3885.6	3880.2	3888.3	3869.3	3833.9	3825.8	3763.2	3689.7	3673.4	3553.7	3425.8
15°	3972.7	3953.6	3970.0	3961.8	3937.3	3934.6	3877.5	3795.8	3774.1	3629.8	3472.0
17.5°	4018.9	4008.1	4027.1	4029.8	4018.9	4038.0	3983.6	3885.6	3866.6	3700.6	3512.8
20°	4051.6	4035.3	4057.0	4073.4	4081.5	4119.6	4076.1	3980.9	3959.1	3768.6	3550.9
22.5°	4163.2	4127.8	4130.5	4141.4	4146.8	4201.3	4174.0	4081.5	4059.8	3853.0	3597.2
25°	4443.4	4372.7	4326.4	4293.8	4255.7	4301.9	4285.6	4195.8	4176.8	3953.6	3654.3
27.5°	4878.8	4789.0	4696.5	4601.2	4451.6	4432.5	4405.3	4323.7	4301.9	4054.3	3711.5
30°	5374.0	5284.2	5175.4	5023.0	4742.7	4595.8	4533.2	4443.4	4418.9	4144.1	3765.9
32.5°	5866.5	5787.6	5678.8	5493.7	5093.7	4794.4	4661.1	4568.6	4544.1	4242.1	3831.2
35°	6250.2	6201.2	6130.5	5899.2	5442.0	5028.4	4846.1	4734.6	4707.4	4397.2	3950.9
37.5°	6560.4	6525.0	6465.1	6223.0	5695.1	5262.4	5058.4	4930.5	4900.6	4565.9	4078.8
40°	7017.5	6925.0	6876.0	6525.0	5915.5	5474.7	5297.8	5164.5	5131.8	4745.5	4182.2
42.5°	7406.6	7338.6	7278.7	6794.4	6125.0	5657.0	5523.7	5401.2	5357.7	4922.3	4293.8
45°	7471.9	7499.1	7469.2	6927.7	6457.0	5836.6	5752.2	5673.3	5632.5	5161.8	4462.5
47.5°	7474.6	7474.6	7297.8	7003.9	6867.9	6037.9	5997.1	6024.3	5980.8	5466.5	4663.8
50°	7278.7	7314.1	7221.6	7022.9	6976.7	6239.3	6296.4	6443.4	6399.8	5790.3	4881.5
52.5°	6873.3	6990.3	6987.6	6993.0	6818.9	6410.7	6612.1	6946.8	6873.3	6154.9	5112.8
55°	6157.7	6391.7	6601.2	6780.8	6682.8	6514.1	6998.5	7482.8	7406.6	6563.1	5346.8
57.5°	5545.4	5695.1	5956.3	6465.1	6522.3	6603.9	7360.4	8043.3	7975.3	7014.8	5591.7
60°	4846.1	5052.9	5314.1	6037.9	6326.4	6720.9	7757.6	8590.3	8525.0	7471.9	5828.4
62.5°	3771.3	4038.0	4560.4	5382.2	6040.7	6794.4	8070.5	9071.9	9041.9	7904.6	6040.7
65°	2628.5	2865.2	3597.2	4576.8	5586.3	6761.7	8320.9	9501.8	9474.6	8258.3	6190.3
67.5°	1534.7	1809.5	2636.7	3684.3	4783.6	6535.9	8402.5	9754.9	9754.9	8473.3	6231.1
70°	876.2	1004.1	1738.7	2685.6	3667.9	5912.8	8173.9	9752.1	9798.4	8424.3	6062.4
72.5°	612.2	669.4	1170.0	1806.8	2487.0	4783.6	7575.3	9281.4	9344.0	7961.7	5485.6
75°	476.2	517.0	824.5	1232.6	1567.3	3248.9	6266.5	7825.6	7991.6	6786.2	4435.3
77.5°	361.9	391.8	481.6	770.0	1004.1	1866.6	4135.9	5131.8	5142.7	4155.0	2378.2
80°	263.9	293.9	321.1	470.7	533.3	873.4	1561.9	2144.2	2084.3	2010.8	1287.0
82.5°	157.8	187.8	195.9	255.8	261.2	372.8	546.9	691.1	663.9	884.3	604.1
85°	68.0	95.2	100.7	117.0	111.6	152.4	217.7	182.3	163.3	187.8	130.6
87.5°	16.3	27.2	27.2	29.9	24.5	38.1	40.8	29.9	27.2	32.7	32.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3330.5	3330.5	3330.5	3330.5	3330.5	3330.5	3330.5	3330.5	3330.5	3330.5	3330.5
2.5°	3311.5	3303.3	3306.0	3259.8	3246.2	3232.6	3224.4	3219.0	3213.5	3221.7	3229.8
5°	3336.0	3316.9	3295.2	3227.1	3199.9	3170.0	3148.2	3129.2	3121.0	3121.0	3129.2
7.5°	3355.0	3322.4	3276.1	3186.3	3137.3	3096.5	3061.1	3036.7	3023.1	3023.1	3031.2
10°	3357.7	3311.5	3238.0	3129.2	3063.9	3004.0	2963.2	2936.0	2916.9	2916.9	2922.4
12.5°	3374.1	3311.5	3216.2	3085.6	3004.0	2930.5	2881.6	2840.7	2832.6	2832.6	2838.0
15°	3401.3	3325.1	3202.6	3047.5	2949.6	2865.2	2810.8	2767.3	2750.9	2761.8	2764.6
17.5°	3425.8	3333.2	3178.1	2998.6	2881.6	2789.0	2729.2	2691.1	2669.3	2693.8	2693.8
20°	3442.1	3333.2	3142.8	2936.0	2808.1	2704.7	2647.6	2601.3	2585.0	2614.9	2617.6
22.5°	3466.6	3330.5	3104.7	2873.4	2729.2	2620.3	2563.2	2527.8	2519.7	2552.3	2563.2
25°	3493.8	3336.0	3063.9	2802.6	2642.1	2536.0	2492.5	2476.1	2481.6	2522.4	2536.0
27.5°	3523.7	3346.9	3023.1	2723.7	2546.9	2451.6	2427.1	2435.3	2457.1	2508.8	2525.1
30°	3550.9	3349.6	2965.9	2631.2	2438.0	2348.2	2359.1	2394.5	2427.1	2478.8	2497.9
32.5°	3586.3	3352.3	2906.0	2530.5	2321.0	2255.7	2304.7	2361.8	2394.5	2443.5	2465.2
35°	3673.4	3398.6	2859.8	2432.6	2212.2	2176.8	2258.4	2331.9	2351.0	2394.5	2413.5
37.5°	3774.1	3474.7	2835.3	2331.9	2106.1	2097.9	2201.3	2274.8	2280.2	2307.4	2326.5
40°	3836.6	3507.4	2808.1	2247.6	2010.8	2016.3	2122.4	2179.5	2168.7	2187.7	2201.3
42.5°	3899.2	3518.3	2750.9	2176.8	1921.0	1926.5	2008.1	2048.9	2054.4	2095.2	2114.2
45°	4005.3	3548.2	2688.4	2111.5	1839.4	1820.4	1869.3	1923.8	1994.5	2073.4	2095.2
47.5°	4146.8	3610.8	2623.1	2032.6	1760.5	1697.9	1717.0	1812.2	1885.7	1959.1	1972.7
50°	4291.0	3673.4	2563.2	1937.4	1681.6	1567.3	1575.5	1662.5	1722.4	1779.5	1787.7
52.5°	4432.5	3727.8	2511.5	1847.6	1591.8	1412.2	1444.9	1534.7	1575.5	1602.7	1610.8
55°	4574.0	3774.1	2465.2	1771.4	1488.4	1289.8	1319.7	1404.0	1444.9	1458.5	1463.9
57.5°	4721.0	3828.5	2429.9	1706.1	1371.4	1180.9	1200.0	1259.8	1297.9	1314.3	1308.8
60°	4843.4	3874.7	2410.8	1638.1	1254.4	1080.2	1074.8	1129.2	1183.6	1200.0	1194.5
62.5°	4938.6	3904.7	2380.9	1551.0	1151.0	979.6	952.4	1023.1	1080.2	1091.1	1099.3
65°	4990.3	3907.4	2307.4	1439.4	1044.9	870.7	851.7	922.4	957.8	968.7	968.7
67.5°	4982.2	3863.8	2163.2	1289.8	946.9	772.8	756.4	800.0	851.7	859.8	851.7
70°	4813.5	3684.3	1931.9	1131.9	829.9	685.7	655.8	699.3	748.3	718.3	704.7
72.5°	4334.6	3219.0	1591.8	957.8	699.3	576.9	563.3	606.8	609.5	615.0	601.3
75°	3420.3	2397.2	1191.8	745.6	566.0	484.3	481.6	473.5	484.3	506.1	489.8
77.5°	1795.9	1197.2	644.9	457.1	410.9	389.1	370.1	367.3	400.0	413.6	397.3
80°	974.1	672.1	370.1	274.8	250.3	253.1	277.5	272.1	307.5	315.6	302.0
82.5°	424.5	318.4	182.3	166.0	166.0	163.3	171.4	190.5	228.6	228.6	182.3
85°	92.5	78.9	70.7	81.6	92.5	92.5	92.5	92.5	65.3	35.4	24.5
87.5°	29.9	29.9	29.9	32.7	35.4	35.4	29.9	21.8	13.6	2.7	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)